Listing of Claims

1-7   (Canceled)

8.   (Previously Presented) A method for controlling data communication in a wireless local area network (LAN), comprising:

checking a battery capacity using a first station; and

determining a transmission characteristic for a wireless LAN communication corresponding to the checked battery capacity,

recording information corresponding to the determined transmission characteristic in a message to be transmitted to the second station; and

transmitting the resulting message to the second station, wherein said wireless LAN communication is between a second station and the first station.

9.   (Previously Presented) The method of claim 8, wherein said transmission characteristic is a data transfer speed and the second station is an access point, wherein data communication with said access point is controlled according to said determined data transfer speed.

10.   (Original) The method of claim 9, wherein said data transfer speed is additionally recorded as a desired bit value in capability information within a beacon frame.

11.   (Original) The method of claim 8, wherein said transmission characteristic is a data transfer speed and the second station is an ad hoc network station, comprising controlling data communication with said ad hoc network station according to said determined data transfer speed.

12.   (Original) The method of claim 11, wherein said data transfer speed is additionally recorded as a desired bit value in capability information within a probe request frame.

13.   (Original) The method of claim 8, wherein said transmission characteristic is a power save period and the second station is an access point, comprising controlling data communication with said access point according to said determined power save period.

14.   (Original) The method of claim 13, wherein said power save period is additionally recorded as a desired bit value in beacon interval information within a beacon frame.

15.   (Original) The method of claim 13, wherein said access point is adapted to transmit a traffic indication message to said first station at a period based on said power save period information transmitted from said first station.

16.   (Original) The method of claim 13, wherein said access point is adapted to determine priorities for data transmission and reception with reference to power save period information transmitted from a plurality of stations including said first station.

17.   (Original) The method of claim 16, wherein said access point is adapted to recognize the respective remaining battery powers of said stations from said power save period information transmitted from said stations and assign a highest priority for data transmission/reception to any one of said stations having a lowest one of the remaining battery powers.

18-20   (Canceled)

21.   (Original) An apparatus for controlling data communication in a wireless LAN, comprising:

    means installed at a station of a wireless LAN card for checking the remaining power of a battery of a host computer connected through an interface;

means installed at said station for determining a transmission characteristic corresponding to the checked battery power and recording information corresponding to the determined transmission characteristic in a message to be transmitted to a receiving terminal; and

means installed at said station for adjusting a data transmission characteristic with the receiving terminal to the determined transmission characteristic.

22.   (Original) The apparatus of claim 21, wherein said transmission characteristic includes a data transfer speed or a transmission power save period.

23.   (Original) The apparatus of claim 22, wherein said data transfer speed and transmission power save period are determined in a multistage manner based on said checked battery power.

24.   (Original) The apparatus of claim 21, wherein said receiving terminal is a second station or an access point, and wherein the message is a probe request frame or a beacon frame.

25.   (Previously Presented) The apparatus of claim 21, wherein the wireless LAN communication comprises an ad hoc mode or an infrastructure mode.

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26-31   (Canceled)

32.   (Previously Presented) An apparatus, comprising:

a transmitting wireless LAN terminal coupled to a host computer and configured to determine remaining battery capacity of the host computer, wherein the transmitting terminal is configured to determine a transmission characteristic for a wireless LAN communication responsive to the remaining battery capacity, wherein said wireless LAN communication is between a receiving terminal and the transmitting terminal, and

wherein the transmitting wireless LAN terminal is configured to record information corresponding to the determined transmission characteristic in a message to be transmitted to the receiving terminal and transmit the resulting message to the receiving terminal.

33.   (Original) The apparatus of claim 32, wherein said transmission characteristic is a data transfer speed and the receiving terminal is an access point, wherein the transmitting wireless LAN terminal is configured to control data communication with said access point, wherein the transmitting wireless LAN terminal is configured to control data communication with said access point according to said determined data transfer speed.

34.   (Original) The apparatus of claim 33, wherein said data transfer speed is recorded as a desired bit value in capability information within a beacon frame.

35.   (Original) The apparatus of claim 32, wherein said transmission characteristic is a data transfer speed and the receiving terminal is an ad hoc network station, wherein the transmitting wireless LAN terminal is configured to control data communication with said ad hoc network station according to said determined data transfer speed.

36.   (Original) The apparatus of claim 35, wherein said data transfer speed is additionally recorded as a desired bit value in capability information within a probe request frame.

37.   (Original) The apparatus of claim 32, wherein said transmission characteristic is a power save period and the receiving terminal is an access point, wherein the transmitting wireless LAN terminal is configured to control data communication with said access point according to said determined power save period.

38.   (Original) The apparatus of claim 37, wherein said power save period is additionally recorded as a desired bit value in beacon interval information within a beacon frame.

39.   (Original) The apparatus of claim 37, wherein said access point is adapted to

transmit a traffic indication message to said transmitting terminal at a period based on said

power save period information transmitted from said transmitting terminal.

40.   (Original) The apparatus of claim 37, wherein said access point is adapted to

determine priorities for data transmission and reception with reference to power save period

information transmitted from a plurality of stations including said transmitting terminal.

41.   (Original) The apparatus of claim 40, wherein said access point is adapted to

recognize the respective remaining battery capacities of said stations from said power save

period information transmitted from said stations and assign a highest priority for data

transmission/reception to any one of said stations having a lowest one of the remaining battery

capacities.

42.   (Previously Presented) A method for controlling data communication in a

wireless LAN, comprising:

    checking remaining power of a battery of a host computer;

    determining a transmission characteristic for the checked battery power;

    recording information corresponding to the determined transmission

characteristic in a message to be transmitted to a receiving terminal; and

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adjusting a data transmission characteristic with the receiving terminal based on

the determined transmission characteristic.

43.   (Previously Presented) The method of claim 42, wherein said transmission

characteristic includes a data transfer speed or a transmission power save period.

44.   (Previously Presented) The method of claim 43, wherein said data transfer speed

and transmission power save period are determined in a multistage manner based on said

checked battery power.

45.   (Previously Presented) The method of claim 42, wherein said receiving terminal

is a second station or an access point, and wherein the message is a probe request frame or a

beacon frame.

46.   (Previously Presented) The method of claim 42, wherein the wireless LAN

communication comprises an ad hoc mode or an infrastructure mode.